

of life than Whites even when their health status is equal. This may lead to racial differences regarding optimal decision making and conclusions based on cost-effectiveness analysis.

PR4

CONVERTING THE SCORES OF A CLINICAL INSTRUMENT FOR MEASURING PAIN TO A PREFERENCE BASED ONE

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Pain is widespread. Many scales have been used for measuring clinical outcomes of pain, but few are preference-based instruments. **OBJECTIVES:** To compare scores derived from the Box-Score-11 (BS-11), a clinical scale widely used for measuring pain, and the Pain attribute (PA) of the Health Utilities Index (HUI-III), a preference-based instrument. **METHODS:** Patients (≥ 18 years) were recruited from pain clinics in four Canadian metropolitan areas (Toronto, Ottawa, Edmonton, Vancouver) and were administered both scales, assessing their average pain level over the previous four weeks. Kendall's tau-b was calculated between score sets and the proportions of the scores derived from the BS-11 that mapped onto each of the five PA scores of the HUI-III. **RESULTS:** Of 516 questionnaires completed, 6 had missing information, leaving 510 for analysis. The average age was 49.5 ± 11.9 years; 70% were female. Tau-b was reasonably large and statistically $= 0.685$, Prsignificant between the scales (< 0.001). No patients scored 0 on either scale, as only patients with pain were included. Two patients scored 1 and yielded inconclusive results. All, except one, of the remaining BS-11 scores mapped at $\geq 60\%$ onto PA scores of the HUI-III respectively: 2 to 2, 3 to 2, 4 to 3, 5 to 3, 7 to 4, 8 to 4, 9 to 5 and 10 to 5; 6 on the BS-11 was mapped onto 4 on the HUI-III with 53% of answers. Scores 2 and 10 had best mapping (88% and 94%). The overall correspondence was considered excellent. **CONCLUSIONS:** This study demonstrated that scores from the BS-11 can be mapped onto the PA component of the HUI-III.

RESPIRATORY DISORDERS

RSI

TRENDS IN MEDICATION PRESCRIBING FOR CHILDREN WITH SLEEP DISORDERS IN US OUTPATIENT SETTINGS

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OBJECTIVES: This study examined trends in physician-prescribing of medications for children with sleep difficulties in outpatient settings in the United States. Additionally, this study also explored the incidence of physician-prescribing patterns of high abuse-potential medications for children, and compared prescribing trends in children versus adults. **METHODS:** This cross-sectional study used data from the National Ambulatory Medical Care Survey (NAMCS) from 1993–2003. Patient aged < 18 years were included in the study sample. We compared this sample to the sample of patients aged 18 years and older. Office visits were considered related to sleep difficulties if relevant ICD-9 codes were recorded and if sleep difficulties was reported as the reason for the visit. Medications were retrieved using the NAMCS drug codes, and all analyses were weighted to make national estimates. **RESULTS:** From 1993 to 2003, approximately one million visits were made for sleep-related difficulty in children. Nearly two-thirds (63%) of these visits were related to male children and 26% of these visits were by children aged less than

three years. Family practice and internal medicine physicians accounted for 21% of the patient visits. Only 2% of visits in children resulted in a prescription for a medication compared to over half the adult population. Similar trends were observed with the prescription of high-abuse potential medications, where adults were 35 times more likely to receive prescriptions of medications with very high abuse potential. There were no time-related differences observed in these prescribing patterns. **CONCLUSION:** The findings of this study seem to suggest that a great deal of caution is being exercised by physicians while prescribing medications for sleep difficulties in children in US outpatient settings, since most of the visits do not result in medication prescription, unlike trends observed in adult patients with similar diagnoses in the same treatment setting.

RS2

COST-EFFECTIVENESS OF TELITHROMYCIN IN THE TREATMENT OF COMMUNITY-ACQUIRED PNEUMONIA

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OBJECTIVE: To compare treatment costs and cost-effectiveness of telithromycin versus other commonly-prescribed therapies for community-acquired pneumonia (CAP). **METHODS:** We developed an economic model to estimate the costs of treating CAP using a utilization-based definition of therapy failure, defined as respiratory-related hospitalization, ER visit, receipt of second antibiotic, or > 1 return office visits within 30 days of therapy initiation. Probability of failure was estimated for amoxicillin/clavulanate, azithromycin, clarithromycin and fluoroquinolones from a longitudinal database; estimates were adjusted using propensity scores based on patient characteristics and prior utilization patterns. Probabilities for telithromycin were estimated using relative risks for each outcome versus clarithromycin from a published clinical trial. Costs of initial therapy and costs of failure were derived from the longitudinal database; probability of clinical cure was estimated from published clinical trials. The model was used to estimate 30-day direct treatment costs, and cost-effectiveness as incremental cost per clinical cure. We used second-order Monte Carlo simulation to evaluate the effect of uncertainty in key model parameters on our findings. **RESULTS:** In base-case analyses, telithromycin had the lowest overall treatment costs at \$174/treated patient, followed by azithromycin (\$219), clarithromycin (\$262) fluoroquinolones (\$315), and amoxicillin/clavulanate (\$340). Clarithromycin had a slightly higher probability of clinical cure (92.1%) than telithromycin (90.5%) but at an additional cost of \$5444/cure. Fluoroquinolones had a slightly higher probability of clinical cure (92.3%) than clarithromycin at a cost of \$24,098/cure. Azithromycin and amoxicillin/clavulanate were dominated. Alternative analyses using AWP and WAC to estimate drug costs yielded similar results. Probabilistic sensitivity analyses showed telithromycin to be the least costly therapy in 88% of 1000 simulations. Telithromycin was cost-effective at a threshold of \$500/cure in 86% of simulations, and at a threshold of \$1000/cure in 83% of simulations. **CONCLUSIONS:** Telithromycin appears to be a cost-effective treatment for CAP versus amoxicillin/clavulanate, azithromycin, clarithromycin and fluoroquinolones.